

# *The* **CRUSHED STONE JOURNAL**

## **In This Issue**

■  
**Silver Anniversary Convention Exceeds  
Every Expectation**

■  
**Report on Business Conditions During  
1941 and the Outlook for 1942**

■  
**A Tribute**

■  
**Quarrying Priorities**



*Silver*  
*Anniversary*  
**CONVENTION  
NUMBER**

**January—February • 1942**

**Official Publication  
NATIONAL CRUSHED STONE ASSOCIATION**



**Technical Publications**  
*of the*  
**National Crushed Stone Association, Inc.**



**BULLETIN No. 1**

The Bulking of Sand and Its Effect on Concrete

**BULLETIN No. 2**

Low Cost Improvement of Earth Roads with Crushed Stone

**BULLETIN No. 3**

The Water-Ratio Specification for Concrete and Its Limitations

**BULLETIN No. 4**

"Retreading" Our Highways

**BULLETIN No. 5**

Reprint of "Comparative Tests of Crushed Stone and Gravel Concrete in New Jersey"  
with Discussion

**BULLETIN No. 6**

The Bituminous Macadam Pavement

**BULLETIN No. 7**

Investigations in the Proportioning of Concrete for Highways

**BULLETIN No. 8**

The Effect of Transportation Methods and Costs on the Crushed Stone, Sand and Gravel,  
and Slag Industries

**BULLETIN No. 9**

Tests for the Traffic Durability of Bituminous Pavements

**BULLETIN No. 10**

Stone Sand

*Single copies of the above bulletins are available upon request.*

Manual of Uniform Cost Accounting Principles and Procedure for the Crushed Stone  
Industry (\$2.00 per copy)

# The Crushed Stone Journal

Official Publication of the NATIONAL CRUSHED STONE ASSOCIATION

J. R. BOYD, Editor

NATIONAL CRUSHED  
STONE ASSOCIATION



1735 14th St., N. W.  
Washington, D. C.

## OFFICERS

WM. M. ANDREWS, President

WM. E. HILLIARD, Treasurer

J. R. BOYD, Administrative Director

A. T. GOLDBECK, Engineering Director

## REGIONAL VICE PRESIDENTS

A. J. CAVIA

W. T. RAGLAND

T. C. COOKE

W. C. SPARKS

F. O. EARNSHAW

A. J. WILSON

PAUL M. NAUMAN

W. F. WISE

## EXECUTIVE COMMITTEE

WM. M. ANDREWS, Chairman

OTHO M. GRAVES RUSSELL RAREY

E. J. KRAUSE

J. A. RIGG

PAUL M. NAUMAN STIRLING TOMKINS

A. L. WORTHEN

## Contents



	Page
Silver Anniversary Convention Exceeds Every Expectation - - - - -	3
Report on Business Conditions During 1941 and the Outlook for 1942	
—J. A. Rigg - - - - -	13
A Tribute	
—Otho M. Graves - - - - -	15
Quarrying Priorities	
—Dr. Wilbur A. Nelson - - - - -	23





**WM. M. ANDREWS**

President, Union Limestone Company, New Castle, Pa., was elected President of the National Crushed Stone Association at its Silver Anniversary Convention.



# THE CRUSHED STONE JOURNAL

WASHINGTON, D. C.

Vol. XVII No. 1

JANUARY-FEBRUARY, 1942

## Silver Anniversary Convention Exceeds Every Expectation

**I**T CAN be said with positive assurance that those who were privileged to attend the Silver Anniversary Convention of the National Crushed Stone Association, held at the Netherland Plaza Hotel in Cincinnati, Ohio, on February 2, 3, and 4, 1942, will never forget that inspiring and historic event. Not since the formation of the Association in 1918 has there been such interest and enthusiasm displayed as was continuously evidenced throughout the entire three-day period of our Twenty-Fifth Annual Meeting. That the close to five hundred delegates in attendance found the program of exceptional interest and value was convincingly shown from the unusually large number present at both the general and group sessions. In fact, for the first time in our recollection there was "standing room only" for the opening session on Monday morning.

Notwithstanding the many difficulties which had to be overcome because of the current emergency, the Manufacturers' Division Exposition was the largest in many years with forty-two companies participating. The opportunity thus afforded the operators present to view firsthand the latest developments in machinery and equipment used in the production of crushed stone and to discuss their operating problems with especially well qualified representatives of the leading manufacturers serving our field, was fully utilized, judging from the many producers constantly present in the exhibit halls.

### Silver Anniversary Banquet

The Silver Anniversary Banquet was unquestionably the highlight of the meeting. Shortly prior to the opening of this affair, head table guests were as-

sembled in one place and at a pre-arranged signal entered the banquet hall as a group with appropriate orchestral accompaniment. As the men selected to sit at the head tables, because of having outstandingly contributed to the growth and development of the Association during its twenty-five years of life, entered the hall the audience spontaneously arose and accorded them prolonged applause. The head tables were placed at three different levels decreasing in length from the lowest to the highest.

The background for the head table set-up was attractively decorated in silver and black, against which was imposed a large seal of the Association appropriately emphasized through the means of effective indirect lighting. Interposed between the background and the first head table was a large American flag and standard concealed by curtains until the opening stanza of the National Anthem was played, at which time the curtains were slowly withdrawn disclosing the flag waving majestically. Words cannot adequately describe the impressive and inspirational effect thus created. It was certainly spectacular and made a lasting and most favorable impression upon those present.

Immediately following the conclusion of the dinner, Otho M. Graves, Past President of the Association, in his capacity as presiding officer, paid tribute to a selected group of those who had outstandingly contributed to the growth and development of the Association during its twenty-five years of life. No attempt will be made to describe this part of the Banquet program as it is given in full text elsewhere in this issue. It should be said, however, that it proved especially interesting and inspiring, due in large part to the presiding officer, Otho M. Graves.



**Past Presidents**  
of the  
**National Crushed Stone  
Association**

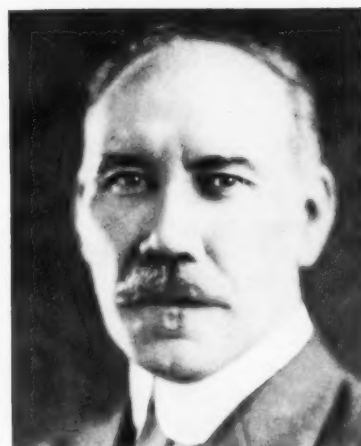
—88—

Arranged in the order in which  
they held office

**T**HE following exhibit of photographs was assembled by the Bucyrus-Erie Company and appropriately displayed in its exhibit booth at our Silver Anniversary Convention. We are sincerely grateful to the Bucyrus-Erie Company for its thoughtful courtesy in presenting these photographs to the Association for its permanent records.



**JOHN RICE**  
1920



**J. J. SLOAN**  
1924



**A. J. BLAIR**  
1918-1919



**RUSSELL RAREY**  
1934-1935



**E. J. KRAUSE**  
1921



**W. SCOTT EAMES**  
1922



**F. W. SCHMIDT**  
1923



**OTHO M. GRAVES**  
1925-1928



**W. F. WISE**  
1929-1930



**A. L. WORTHEN**  
1931-1933



**H. E. RODES**  
1936-1937



**T. I. WESTON**  
1938-1939



**J. A. RIGG**  
1940-1941

Immediately following the ceremonial part of the program, H. W. Prentis, Jr., President of the Armstrong Cork Company, and Past President of the National Association of Manufacturers, gave a most thoughtful and stimulating address entitled, "Roots of American Liberty." The full text of Mr. Prentis' address will be carried in the next issue of the *Crushed Stone Journal* and should be studiously read by every member of the industry.

#### Wm. M. Andrews Elected President

The election of Association officers took place at the session on Tuesday morning, resulting in the unanimous selection of the following members of the Board and Regional Vice Presidents, in accord with



G. A. AUSTIN



W. HARTLEY LINDSAY

Newly elected to Board of Directors

the report of the Nominating Committee submitted by its Chairman, A. L. Worthen. New members elected to the Board were G. A. Austin, President, Consolidated Quarries Corp., Decatur, Georgia, and W. H. Lindsay, Manager, Canada Crushed Stone Ltd., Hamilton, Ontario, Canada.

#### Board of Directors

Wm. M. Andrews, *Chairman*, Union Limestone Co., New Castle, Pa.  
 G. A. Austin, Consolidated Quarries Corp., Decatur, Ga.  
 C. C. Beam, Melvin Stone Co., Melvin, Ohio  
 W. P. Beinhorn, The Trap Rock Co., Minneapolis, Minn.  
 H. E. Billman, Rock Hill Stone and Gravel Co., St. Louis, Mo.  
 L. J. Boxley, Blue Ridge Stone Co., Roanoke, Va.  
 \*Fred Braun, The W. S. Tyler Co., Cleveland, Ohio  
 J. Reid Callanan, Callanan Road Improvement Co., South Bethlehem, N. Y.  
 A. J. Cayia, Inland Lime and Stone Co., Gulliver, Mich.

\* Representing the Manufacturers' Division on the Board of Directors of the National Crushed Stone Association.

T. C. Cooke, Lynn Sand & Stone Co., Swampscott, Mass.  
 F. O. Earnshaw, Carbon Limestone Co., Youngstown, Ohio  
 A. F. Eggleston, John S. Lane and Son, Inc., Meriden, Conn.  
 \*J. Harper Fulkerson, Cross Engineering Co., Carbondale, Pa.  
 Otho M. Graves, The General Crushed Stone Co., Easton, Pa.  
 A. Acton Hall, Ohio Marble Co., Piqua, Ohio  
 G. F. Hammerschmidt, Elmhurst-Chicago Stone Co., Elmhurst, Ill.  
 T. Ward Havely, Central Rock Co., Lexington, Ky.  
 J. L. Heimlich, LeRoy Lime and Crushed Stone Co., LeRoy, N. Y.  
 R. P. Immel, American Limestone Co., Knoxville, Tenn.  
 E. J. Krause, Columbia Quarry Co., St. Louis, Mo.  
 J. D. Lane, Raleigh Granite Co., Raleigh, N. C.  
 W. H. Lindsay, Canada Crushed Stone Limited, Hamilton, Ont., Canada  
 Paul M. Nauman, Dubuque Stone Products Co., Dubuque, Iowa  
 I. A. Ogden, Servtex Materials Co., New Braunfels, Texas  
 W. T. Ragland, Superior Stone Co., Raleigh, N. C.  
 H. E. Rainer, Federal Crushed Stone Corp., Buffalo, N. Y.  
 Russell Rarey, Marble Cliff Quarries Co., Columbus, Ohio  
 John Rice, The General Crushed Stone Co., Easton, Pa.  
 J. A. Rigg, Acme Limestone Co., Fort Spring, West Virginia  
 H. E. Rodes, Franklin Limestone Co., Nashville, Tenn.  
 Dan Sanborn, Lehigh Stone Co., Kankakee, Ill.  
 James Savage, Buffalo Crushed Stone Co., Buffalo, N. Y.  
 F. W. Schmidt, Jr., North Jersey Quarry Co., Morristown, N. J.  
 \*L. W. Shugg, General Electric Co., Schenectady, N. Y.  
 W. C. Sparks, Cedar Bluff Quarry, Princeton, Ky.  
 O. M. Stull, Liberty Limestone Corp., Rocky Point, Va.  
 Stirling Tomkins, New York Trap Rock Corp., New York City  
 W. H. Wallace, Wallace Stone Co., Bay Port, Mich.  
 W. S. Weston, Weston & Brooker Co., Columbia, S. C.  
 D. L. Williams, Virginian Limestone Corp., Ripplemead, Va.  
 Harold Williams, Boston, Mass.  
 A. J. Wilson, Granite Rock Co., Watsonville, Calif.  
 W. F. Wise, Southwest Stone Co., Dallas, Texas  
 A. L. Worthen, The New Haven Trap Rock Co., New Haven, Conn.

Prior to the election of Regional Vice Presidents, an additional Region was created and designated as the New England Region and upon recommendation



WM. M. ANDREWS  
Union Limestone Co.  
New Castle, Pa.



OTHO M. GRAVES  
General Crushed  
Stone Co., Easton, Pa.



E. J. KRAUSE  
Columbia Quarry Co.,  
St. Louis, Mo.

## EXECUTIVE COMMITTEE

of the

NATIONAL CRUSHED STONE ASSOCIATION

elected by the Board of Directors at its meeting in

Cincinnati on February 3, 1942



PAUL M. NAUMAN  
Dubuque Stone Prod-  
ucts Co.  
Dubuque, Iowa



RUSSELL RAREY  
Marble Cliff Quarries  
Co., Columbus, Ohio



J. A. RIGG  
Acme Limestone Co.,  
Fort Spring, W. Va.

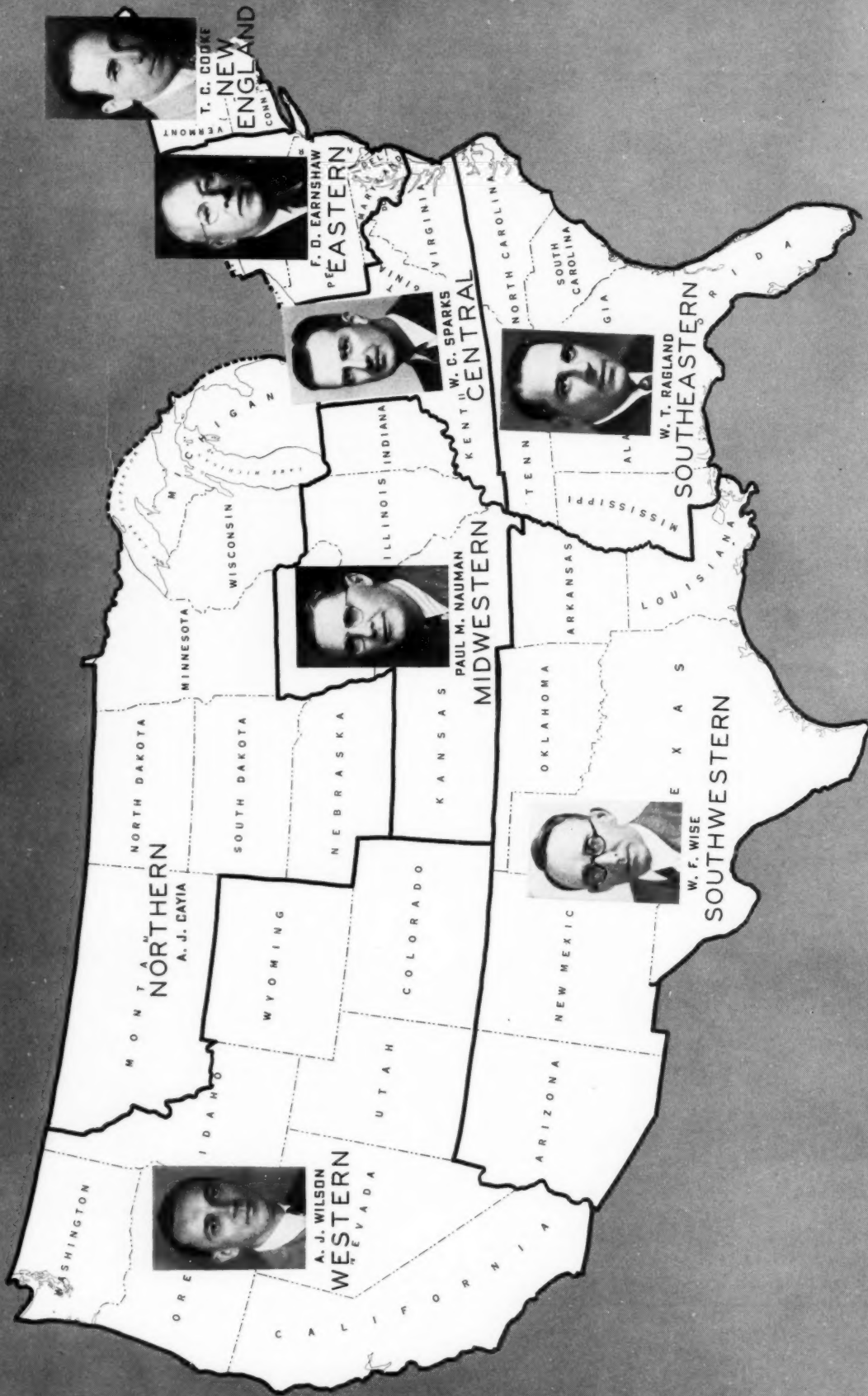


STIRLING TOMKINS  
New York Trap Rock  
Corp., New York City



A. L. WORTHEN  
New Haven Trap  
Rock Co., New  
Haven, Conn.





T. C. COOKE  
NEW ENGLAND



F. D. EARNSHAW  
EASTERN



W. C. SPARKS  
CENTRAL



W. T. RAGLAND  
SOUTHEASTERN



PAUL M. NAUMAN  
MIDWESTERN



W. F. WISE  
SOUTHWESTERN



A. J. WILSON  
WESTERN

of the Nominating Committee the following Regional Vice Presidents for the Regions indicated were unanimously elected:

Eastern—F. O. EARNSHAW  
 New England—T. C. COOKE  
 Midwestern—PAUL M. NAUMAN  
 Southeastern—W. T. RAGLAND  
 Central—W. C. SPARKS  
 Northern—A. J. CAYIA  
 Western—A. J. WILSON  
 Southwestern—W. F. WISE

As the climax of the report of the Nominating Committee, its candidate for President was named and in describing this important phase of the Convention program we can do no better than to quote directly the following remarks made by Mr. Worthen, Chairman of the Committee:

"It is now the privilege of the Nominating Committee to place before you our choice of the man who, when elected, will become your President for the coming term. Except for the feeling which has existed for some time that it was unfair to ask a man to serve as President for more than two years, and except for the fact that because of that our policy of a two-year term has now become a precedent, I am sure the Nominating Committee would have endeavored to prevail upon Mr. Rigg to accept re-election for another term, and I am sure it would have met with the wholehearted approval of this Association.

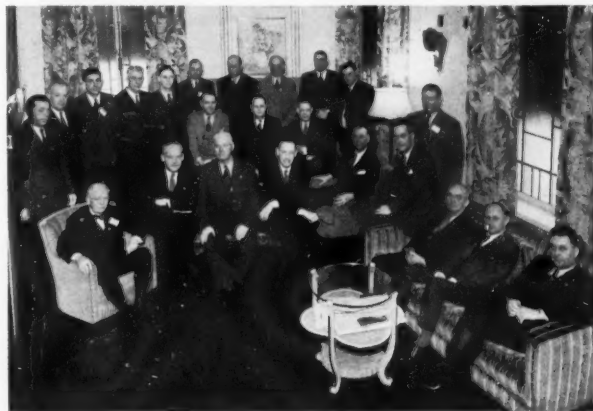
"When Mr. Rigg joined the Association, we were very much impressed by his keen interest in Association affairs. When he addressed the Association it was always with some constructive suggestion; or if not that, it was to offer a word of praise or commendation to Mr. Goldbeck and to the Engineering Bureau in which he was very much interested.

"Since he has been our President, we have come to admire him and to respect his judgment, and I am sure I am only voicing what is in the minds of all of those present in the room when I tell him how much he has endeared himself to us, and how happy we have been to have had him as our President for two years.

"Your committee is very happy and very proud of its selection of the man I am about to nominate as President on behalf of the committee. He has been a member of this Association almost from its beginning. He has given wholehearted support to the Association ever since he has been a member. He has been regular in attendance. He has been a member of our Executive Committee a number of times, and

he has always had the success of this Association deep down in his heart.

"We know that this nominee has the same lovable and tolerant disposition and manner as the man who is just retiring, and so it is with great personal pleasure that I offer to you on behalf of the Nominating Committee, the name of Mr. William M. Andrews, President, Union Limestone Company, New Castle, Pennsylvania."



TO THE GENERAL CRUSHED STONE CO., GOES THE DISTINCTION OF HAVING THE LARGEST NUMBER OF REPRESENTATIVES PRESENT.

Standing left to right: E. Z. Cole, J. W. Richards, P. H. Gibbons, D. C. Hickey, L. M. Croll, W. J. Hinds, M. Bovee, A. G. Seitz, W. M. Lunan, A. R. Nash, W. H. Seiler; Center three left to right: C. A. Reid, Redington Moore, H. B. Allen; Seated left to right: John Rice, Sr., John Rice, Jr., J. D. Hawthorne, I. H. Boggs, O. M. Graves, B. P. Rex, H. R. Cox, H. F. Yotter, E. E. Dotter. (Geo. E. Schaefer, not in picture.)

That the selection of Bill Andrews as President for the ensuing year was enthusiastically accepted by the Convention was convincingly demonstrated by the prolonged applause which greeted the placing of his name in nomination. Upon his unanimous election he was escorted to the platform by Ex-President John Rice and Retiring President J. A. Rigg. In a few well chosen words President-elect Andrews expressed his very deep appreciation for the honor conferred and pledged his wholehearted cooperation in the conduct of Association affairs during the coming year.

#### Officers and Executive Committee Elected by Board of Directors

The newly elected Board of Directors at its meeting on Tuesday afternoon, February 3, 1942, re-elected Wm. E. Hilliard, The New Haven Trap Rock Co., New Haven, Conn., Treasurer; A. T. Goldbeck, Engineering Director; and J. R. Boyd, Administrative Director. Also the following members of the Board



### HEAD TABLE GUESTS AT SILVER ANNIVERSARY BANQUET

(Seated left to right)

#### UPPER TABLE

John C. Gall, J. Harper Fulkerson, John Rice, H. W. Prentiss, Jr., Otho M. Graves, Presiding, J. A. Rigg, Wm. M. Andrews, Col. Willard Chevalier, C. M. Upham

#### CENTER TABLE

A. J. Sullivan, James Savage, N. C. Rockwood, Wm. S. Armstrong, C. A. Munson, Russell Rarey, E. J. Krause, A. L. Worthen, H. E. Rhodes, F. W. Schmidt, Jr., W. S. Weston, A. J. Wilson, A. T. Goldbeck

#### LOWER TABLE

Claude L. Clark, A. G. Seitz, L. W. Shugg, Roy Wills, C. S. Huntington, F. O. Wyse, B. G. Shotton, M. B. Garber, W. E. Farrell, E. G. Lewis, Abe Goldberg, S. R. Russell, H. A. Johann, Fred Braun, R. W. Cunningham, T. C. Cooke, John C. Lauber

AMONG THOSE PRESENT AT THE SILVER ANNIVERSARY BANQUET



THE SEVEN HUNDREDTH BANQUET



of Directors were elected to serve on the Executive Committee for the ensuing year:

WM. M. ANDREWS, Chairman	RUSSELL RAREY
OTHO M. GRAVES	J. A. RIGG
E. J. KRAUSE	STIRLING TOMKINS
PAUL M. NAUMAN	A. L. WORTHEN

#### **Manufacturers' Division Re-elect J. Harper Fulkerson as Chairman**

The annual business meeting of the Manufacturers' Division was held at 9:00 a. m., on Tuesday morning, February 3, 1942, with fifty-two members of the Division present. This makes the second successive year that the Manufacturers' Division has held an outstandingly successful business meeting at breakfast and accordingly, in the future this event will be scheduled as a regular feature of the Convention program.



J. HARPER FULKERSON  
Cross Engineering Co.  
Re-elected Chairman,  
Manufacturers'  
Division

Breaking a precedent of a number of years' standing, J. Harper Fulkerson was practically drafted to serve the Division as its Chairman for a second term. This distinction is a well deserved honor as during the past

year Mr. Fulkerson gave much of his time and en-

ergy toward furthering the interests of the Manufacturers' Division. He was ever alert to cooperate in every possible way in advancing the mutual interests of the National Association and its Manufacturers' Division. His re-election to office is a well deserved tribute.

Vice Chairmen and Members of the Board of Directors of the Division were elected as follows:

#### *Vice Chairmen*

J. C. FARRELL	L. C. MOSLEY
R. C. JOHNSON	MILØ A. NICE
C. H. ROBERTS	

#### **Board of Directors**

J. Harper Fulkerson, *Chairman*, Cross Engineering Co., Carbondale, Pa.  
Fred Braun, The W. S. Tyler Co., Cleveland, Ohio  
A. E. Conover, Robins Conveying Belt Co., Passaic, New Jersey  
M. A. Eiben, Northern Blower Co., Cleveland, Ohio  
J. C. Farrell, Easton Car & Construction Co., Easton, Pennsylvania  
E. J. Goes, Koehring Co., Milwaukee, Wis.  
C. S. Huntington, Link-Belt Co., Chicago, Ill.  
John M. Jeffries, Atlas Powder Co., Wilmington, Del.  
Kenneth Jensen, Kensington Steel Co., Chicago, Ill.  
H. A. Johann, The Frog, Switch & Mfg. Co., Carlisle, Pennsylvania

(Continued on page 14)

#### **BREAKFAST MEETING OF THE MANUFACTURERS' DIVISION**





# Report on Business Conditions During 1941 and the Outlook for 1942<sup>1</sup>

## A Summary of Reports by Regional Vice Presidents

By J. A. RIGG

President, National Crushed Stone Association



**I**T IS my desire to here express my thanks to the Regional Vice-Presidents for their 100 per cent cooperation in submitting the detailed information on which this report is based.

As anticipated in our report of a year ago, there was a very considerable increase in crushed stone production in 1941 over that of 1940, which increase seems to have been universal with the exception of the New

York Metropolitan District. Increases have been due almost entirely, either directly or indirectly, to the Defense Program. In some sections a number of plants report having operated at 100 per cent capacity, although for the country generally there seems to be ample margin of capacity yet above the demand. In a number of cases plants have been erected on or near the site of large defense projects which has increased capacity along with increased demand.

For the first time in a number of years there has been some increase in the price level. From no Region was there a report of such increase as to demand any serious attention from the Price Control Administration.

The demand for crushed stone for highway construction and maintenance was probably a little larger in 1941 than in 1940. However, generally speaking this demand can be said to have been about normal, as was, also, true of railroad ballast. As was anticipated a year ago there was a heavy increase in the production of fluxing stone; a considerable increase in the use of Agricultural Limestone; and some increase during the early part of the year in requirements for general construction, but aside from the

increase in the demand for fluxing stone the large increase took place in the demand created by defense construction.

As to the outlook for 1942, it is universally expected that except in areas where there is heavy production of defense materials or defense projects, highway construction will be seriously curtailed, but maintenance programs will probably continue on a normal basis throughout the greater part of the year. Miscellaneous building construction is expected to decline. The use of railroad ballast will undoubtedly be increased to some extent, and the use of Agricultural Limestone will continue at the present rate to July 1, unless its delivery to the farmers should be affected by reason of inability of farmers and truckers to obtain tires. Just what effect the war will have on the continuance of the Soil Conservation Program is uncertain at this time. In as much as the steel and chemical industries have been working at practically 100 per cent capacity throughout the Year 1941, much further increase in the demand for fluxing and chemical stone may not be expected for the Year 1942.

It is generally expected that requirements of crushed stone for the construction of defense projects and plants having to do with the manufacture of war materials will sustain the demand for crushed stone for construction of this nature throughout the Year 1942. However, as pointed out by one Regional Vice-President, this will create a very spotty condition in the industry in some sections, some plants having all they can do while the curtailment of other construction activities using crushed stone will necessarily work a hardship on producers remotely situated with reference to defense construction and war production.

Some increase in the price level will undoubtedly be made necessary by reason of continued increase in costs of all items entering into production.

There has, up to this time, been no serious car shortage, but with the increased movement of war materials, and the interference with coastal freight movement by water on account of submarine activ-

<sup>1</sup> Presented at the Twenty-Fifth Annual Convention, National Crushed Stone Association, Netherland Plaza Hotel, Cincinnati, Ohio, February 2, 1942.

ity, and shortage of bottoms, car shortages are expected for the Year 1942. This will no doubt be accentuated by increased movement of freight by rail in the event the tire shortage should affect truck transportation. Just how serious it will be no one ventures an opinion, but all are reconciled to the fact that car shortage is inevitable.

Difficulty in securing supplies and repair parts is universally reported from all sections and it is anticipated that difficulties along this line will increase, and that it will be impossible to obtain machinery for increasing production of present plants, or the erection of new ones, unless such construction can be unquestionably justified as a matter of a defense or war necessity.

All Regions report the industry as having been able to take care of normal demands as well as the demand for defense projects without the necessity of Government interference. Although, in a few cases it seems there has been a warning that such an eventuality might take place if the necessity arose. No exception has been taken to such possible action by the Government if found necessary. The entire industry accepts the fact that our country is now engaged in the prosecution of a world war of far-flung battle lines, with adversaries of unquestioned courage and a decided military advantage to begin with.

We of the crushed stone industry expect to do our part towards the winning of this war by producing to the utmost where we are called upon to produce, and accept philosophically any dislocations and sacrifices that the transition of our nation from peace to a war footing makes necessary.

Mr. Andrews of the Eastern Region in his excellent and detailed report paid high tribute to the fine work being done by Mr. Boyd, Mr. Goldbeck and the Washington Staff.

Never before has the trade association been accorded such recognition as is now being given to this medium of handling governmental problems with industry, and consequently never before have trade associations been of such importance and value to the individual members of industry.

The affairs of our own industry are being capably, efficiently and energetically handled by our Washington Office, and the members of the Executive Committee, particularly Mr. Graves, Mr. Rarey, Mr. Tompkins and Mr. Worthen, have given without stint of their time and effort. No individual operator of the industry can afford today to be without the services rendered by the Association, and to use its services and benefit by its efforts without contributing a

fair share of time and expense, to speak plainly, is parasitic.

Not only is the Washington Staff looking after the general interests of the industry but they will gladly and willingly render any assistance they possibly can to any individual member in the many dilemmas in which he is likely to find himself under the rapidly changing conditions created by the war emergency.

## Silver Anniversary Convention

(Continued from page 12)

R. C. Johnson, Simplicity Engineering Co., Durand, Michigan

J. Craig McLanahan, McLanahan & Stone Corp., Hollidaysburg, Pa.



L. W. Shugg  
General Electric Co.  
Director of Exhibits

L. C. Mosley, Marion Steam Shovel Co., Marion, Ohio

Milo A. Nice, Hercules Powder Co., Wilmington, Del.

F. O. Reedy, Kennedy-Van Saun Mfg. & Eng. Co., New York City

C. H. Roberts, Traylor Eng. & Mfg. Co., Allentown, Pennsylvania

S. R. Russell, E. I. duPont de Nemours & Co., Wilmington, Del.

Bruce G. Shotton, Hendrick Mfg. Co., Pittsburgh, Pa.

L. W. Shugg, General Electric Co., Schenectady, N. Y.

P. C. Tennant, The Texas Co., New York City

J. B. Terbell, American Manganese Steel Division, The American Brake Shoe and Foundry Co., Chicago Heights, Ill.

J. A. Trainor, Taylor-Wharton Iron & Steel Co., High Bridge, N. J.

Frank B. Ungar, Ludlow-Saylor Wire Co., St. Louis, Missouri

Roy Wills, Lima Locomotive Works, Lima, Ohio

F. O. Wyse, Bucyrus-Erie Co., South Milwaukee, Wis.

### Convention Papers to be Made Available

Limitations of time and space made it inadvisable to give a detailed account, session by session, of the Silver Anniversary Convention. Addresses and discussions which proved particularly interesting and valuable will be made available either through this and subsequent issues of the *Crushed Stone Journal*, or direct.

### In Appreciation

To all of our guest speakers we wish to express sincere appreciation for the valuable contributions which they made to the outstanding success of our Silver Anniversary Convention. We are likewise

(Continued on page 29)

## **Tribute** to those who have outstandingly contributed to the growth and development of the National Crushed Stone Association during the twenty-five years of its life, presented at the Silver Anniversary Banquet

By **OTHO M. GRAVES**

Past President, National Crushed Stone Association



**I**N recognition of the fact that the United States and Great Britain are allies in a tremendous war effort in which they fight for their very existence, I ask you to join me in breaking precedent to the extent of offering a toast to three men at the same time. I ask you to drink to them in the nearest liquid at hand, and with a prayer in your hearts that God may

bless Franklin Delano Roosevelt, President of the United States; His Majesty, King George the Sixth of England; and his Prime Minister, Winston Churchill.

This, as you know, Ladies and Gentlemen, is the Twenty-Fifth and Silver Anniversary celebration of our Association. May I say at the outset that I deeply appreciate the honor of being requested to preside at this Dinner tonight. I shall express my gratefulness by not endeavoring to make any kind of a talk or speech. I frankly admit that I would like to. It seems to me an occasion when one would wish to talk but I am not going to, except to discuss certain matters which we hope will be pleasing to you and which your Board of Directors instructed me to consider with you.

We may well take a moment to look backward over the years and to recall to our minds, so that we may better understand what we are proposing to do tonight—that this Association (in the words of a distinguished gentleman at this table) was conceived in Columbus, Ohio, and had its birth three weeks later in Chicago, thus violating as to the element of time the usual laws of nature. A call had been issued for those in the Industry to assemble in Chicago on February 7, 1918, at the LaSalle Hotel. A few weeks prior to that time it appeared that a new Association was being formed—an Association of Associations,

to be called the National Highways Industries Association. Do you remember that, Charlie? [Turning to address Mr. Charles Upham at the Speaker's Table.] It seemed to those who were then interested in this Industry, desirable that we have from our Industry a representative in the National Highways Industries Association, but the meeting of that body for organizational purposes was to occur on January 26th. Consequently the Ohio Macadam Association called a meeting of our Industry for January 21st, sending invitations to the only four local Associations which were at that time known in the mid-west; namely, those in the States of Ohio, Illinois, Indiana and Wisconsin. As a matter of fact there were local Associations in the States of New York and Pennsylvania, but the members of our Industry at that time did not have a sufficiently broad knowledge of one another to realize that fact.

The meeting was held, as you doubtless will recall, in Columbus, Ohio, on January 21st, at which time, Mr. A. P. Sandles, who was then Secretary of the Ohio Macadam Association, was elected the representative of the Industry to the Highways Industries Association. Mr. A. J. Blair was elected Temporary Chairman and Nathan Rockwood, Temporary Secretary. Please understand that no one was trying to beat the gun or get the jump on the meeting called for Chicago on February 7th. The call for this meeting was regarded as the formal call for the organization of this Association. The purpose, however, for the earlier meeting, was as I stated, to elect a representative to serve on the Highways Industries Association.

The Industry assembled in Chicago pursuant to call, on February 7th, 1918. Mr. A. J. Blair was elected President; Nathan Rockwood continued as Temporary Secretary. Mr. E. J. Krause refused the nomination for Treasurer because of his modesty, which characterizes him even today, on the ground that someone else was better fitted for the task, and so A. J. Sullivan was elected our first Treasurer.



These were the first officers of the Association, but it may be asked—Why did the Industry need an Association? You remember this morning, in his address to the Convention, that Colonel Chevalier said, and it was as impressive to you as it was to me—that an Association needed a purpose to justify its existence, and that unless the necessity of that purpose continued, then it lost any right to continue to live. Well, those who organized this Association in Chicago in February, 1918, were motivated by a distinct purpose, which was, frankly, that of self-protection. We were engaged in a World War. The Interstate Commerce Commission had just issued Priority Order Number 2, which withdrew from use all open-top equipment for moving the commodities of this Industry, which obviously was a severe blow and threatened the very continuance of our Industry.

Three definite subjects were before this first meeting for consideration. First—structural organization;—Second, consideration of freight rates; and Third, and not the least,—discussion as to how the Industry might adapt itself to ICC Priority Number 2, or to what extent could that order be modified. It must seem to you, of course, as it does to me, a tragic circumstance that when we celebrate our Silver Anniversary, twenty-five years later, with all the waters which have flowed down the stream (I state water intentionally) in those twenty-five years, that we should do so when this Nation is again engaged in a struggle for its very existence. This thought inescapably occurs to us,—that in the year 1918 when the Association was formed, it was solely for the purpose of self-protection. Now, however, we find ourselves much more advantageously situated. We now have an effective, smoothly operating Association, in which we all have confidence, but our purpose today, I submit to you, is not only that of self-protection of the industry, but also, and more largely, we are enabled through our Association to better serve the interests of this Nation, while it is engaged in war. That is something which we must, and I am sure, we will bear in mind.

But to return to the sequence of events as to the life of this Association. At this meeting in Chicago, at the LaSalle Hotel on February 7, 1918, Buffalo was selected as the next convention city. In Buffalo, Mr. A. J. Blair was reelected President. I share with you your regret that Mr. Blair, our first President, cannot be with us tonight, and that because his wife is seriously ill in Florida. He wrote us a note in which he asked that I convey to you his greetings and

to tell you that even though he was not with us in person, his heart was in this room. I am also sorry,—I do seem to be indulging in a great deal of regret at this moment, which I hope will not last throughout these remarks—that we have no one to accept on Mr. Blair's behalf, the tribute which I know you would like to pay to him, but in deference to the first President of this Association, let us all join in applause—To A. J. Blair! [Applause.]

Now in Buffalo I think it is interesting to observe, that neither the Board of Directors nor the Association devoted the amount of time which we spend today in selecting the next convention city. In reading the minutes, the city seems to have been very hastily selected. It was Louisville, because apparently of the assurance from Brink Tyler that if the convention would go there in 1920, he would see that there were four barrels of good old Kentucky Bourbon on the top floor of the hotel. [Laughter.] It appears that no formal vote, whatever, was taken. By general acclaim, Louisville was selected as the next convention city.

The presence of the Bourbon may, or may not, have had certain effects. It is to be observed, in looking over the records, that that is the only convention the attendance of which was not recorded in the pages of Rock Products. Doubtless these two circumstances are purely coincidental. On the other hand, and vigorously disclaiming any such implication as I have outrageously made, the good judgment of those at the convention was clearly not affected, because it was at that convention, in the year 1920 that Mr. John Rice was elected the second President of the Association. I wish to be very serious at this point. At that time, and ever since, I submit to you, and I think you will agree with me, Mr. Rice has been considered the Dean of this Industry. He brought to this Association something of his qualities of courage and vision. You will recall with me, I imagine, the emphasis which he so constantly placed in his public addresses to the Convention, on the necessity of adapting ourselves to the demands of life if we expected to live. I remember Mr. Rice mentioning at one time those Dinosaurs and Ichthyosauria who used to roam the earth but could not adapt themselves to the new environment in which they found themselves, and so sloughed away. It made a deep impression, I think, on many of us, and further than that, Mr. Rice, you contributed many fine things to this Association,—things of quality and character. I would like to add, and I see no reason why I should not, even publicly at this time, that to

such extent as I may personally, and that may be problematical, have been able to contribute to this Association, it has been because of my personal association with Mr. Rice. I give you, and will you stand,—Mr. Rice. [Applause.]

In Toronto, Canada, in one of those two Canadian cities in which this Association had such happy and delightful conventions, in the year 1921, we elected as our President, E. J. Krause. He had been identified from the earliest days, as I have previously indicated, with not only the conception of the Association, but with its birth as well. Mr. Krause brought to the Presidency a charm of manner which has endeared him to all of us. We have had no more faithful and loyal a member over the years than E. J. Krause. Mr. Krause, will you stand? [Applause.]

Our fourth President was elected in Chicago, in 1922. Scott Eames brought to the Presidency a wealth of executive ability. He was not content that the Association should merely continue along the lines which he felt were somewhat limited so he undertook to broaden and to expand our undertakings. It was during his Administration that the first real vigorous effort was made to increase membership. Scott isn't with us tonight, except in our hearts, but we have asked someone who was closely associated with him during his business career, and who missed him keenly on his death, to stand tonight and accept the tribute in Scott's behalf. In giving this tribute to Scott, we do so through Clarence Munson, of the New Haven Trap Rock Company. [Applause.]

In those days we went to Chicago with our Conventions almost as often as we now come to Cincinnati. It was again in Chicago in 1923 that F. W. Schmidt was elected President of the Association. F. W., as most of us called him, was as big in heart as he was in stature. He was the chief executive of a group of companies in New Jersey, and he, too, brought to the Association that type of executive ability that was so definitely needed at the time. We do not have F. W. with us tonight, either, but we do have one of his two sons. I am going to ask F. W. Schmidt, Jr. or "Bud" to us, to please stand and accept this tribute to his Father. [Applause.]

It was at the St. Louis Convention in 1924 that there was elected to the Presidency a man who had been in the Association for only some two years and I mention that circumstance because of its exceptional characteristic. Our good judgment in electing him to the Presidency was amply verified. He quickly made his mark with us. Of course I am referring to John J. Sloan. During the year of his

Presidency of the Association our own judgment was confirmed by the fact that he was appointed by his own City of Chicago, Director of Public Works. We all remember Mr. Sloan with the greatest respect and affection. His vigorous personality did much to promote the growth of the Association. We cannot have him with us tonight, either, but his grandson, William Sloan Armstrong is here and we are going to ask William if he will stand but for a moment or two and accept the tribute which you will all wish to pay to his grandfather—John J. Sloan. [Applause.]

For the next four years you generously gave me the opportunity and honor of serving as your President so we will skip that period. [Applause.]

In January of 1929 at the Hollenden Hotel, in Cleveland, we turned to the southwest for a President and selected a man whose devoted loyalty to the interests of the Association had been outstanding. Of course you know that I am referring to Bill Wise. During his presidency it was remarkable to us on the Board and on the Executive Committee how faithfully Bill would take the trips to and from Dallas, Texas, to Washington when occasion demanded, which was not infrequent. His trips were not limited to attendance at Board and Executive meetings. He went to Washington oftener than that because of his belief that he should maintain reasonably constant touch with the Washington staff and the work of the laboratory, in which he was intensely interested. Bill, as many of you may know,—and if you do not, you will be sorry to hear it,—is seriously ill in a hospital in Dallas, Texas. Day before yesterday your Board wired him its sympathy and expressed the hope of all of us for his early recovery. We are hoping for a reply as to his present condition. We do not have anyone to accept the tribute on Bill's behalf, but that does not make it any the less sincere. To Bill Wise. [Applause.]

In January '31, in St. Louis, and again in Pittsburgh in '32, and for a third time in Detroit in 1933, Al Worthen was elected our President. I do not need to tell you that Al Worthen is meticulously faithful in all that he undertakes. His administration typified that careful conservation of our resources and a broadening and extending of our activities. Nothing was ever too much trouble for Al to do. At no time did he undertake to do that which he felt, however mistakenly, that someone else might do better. Most sincerely, with a full recognition of all that he has contributed to the growth and development of this Association, I give you Al Worthen. [Applause.]

In Cincinnati in '34, and again in '35 in Chicago, a



citizen of this State and from the very city in which this Association was conceived, we elected as our President, Russell Rarey of Columbus, Ohio. His administration, I think, presented perhaps more outstanding difficulties than did that of any of the other Presidents in that his was the difficult task of maintaining the autonomy, identity and life of this Association when at the same time we were part of a Three-Industry Code Authority. That Russ admirably discharged that difficult task and yet submerged the interests of this Industry to the common cause of the Code, wholly justified his election to the Presidency. It is with pleasure and gratification that I give you Russell Rarey. [Applause.]

In 1936, in St. Louis, and again in 1937, the Association turned to the south for its President—Henry Rodes. Will you stand, Henry? [Applause.] It was during the administration of Mr. Rodes that we drastically revised the structural operation of the Association, placing greater responsibility on both Mr. Boyd and Mr. Goldbeck. During the period of that critical change we could have had no better leader than Henry Rodes. [Applause.]

I find, Ladies and Gentlemen, and again I must express regret, that I shall have to be more brief, apologizing first to those men who may think that I have given more time to those who preceded them. It isn't that—it is because I am watchful of the time and I do not wish to use too much of it and thereby lessen that which should be devoted to the speaker of the evening.

Our next President, Ike Weston, was from South Carolina. I don't suppose there was a man in this Association held in deeper respect and affection. He isn't here, either, but it isn't so long ago that we lost him. But his brother is here. Steve, will you accept this tribute to your brother, Ike? [Applause.]

And now, lastly, to our, shall I say, baby Ex-President—J. A. Rigg. [Applause.] I know of no one, and I think you will agree, who is more modest in his character; who is more quick to give credit to others where it is really due to him; nor do I know of anyone who more vigorously and patiently and persuasively advocated the cause of research in this Industry by our Association; nor do I know of anyone who has constantly contributed more liberally to it. [Applause.]

Will you stand up, Mr. Andrews? [Applause.]

I need not tell you that Bill Andrews is our new President. Nor need I tell you, Bill, that all of us pledge to you and your administration, that loyalty and fidelity to our common cause that has been con-

sistently given the administrations of your predecessors. [Applause.]

All of us understand, as Colonel Chevalier expressed in his address to the Convention, that leadership isn't the whole story. We also need, as the Colonel stated, true fellowship. These Ex-presidents have given us leadership, but we all know that the growth and development of this Association has been due not only to its leadership, but to the devoted loyalty of its membership.

It is difficult to single out one member from another as to devotion to our interests, yet I have in mind certain individuals in this Association who have definitely contributed to our growth and development. There are so many of them that it seems almost unfair to draw any distinction between them, but certain ones I hope you will agree, did certain things that on a night like this might well be mentioned.

I think of Charlie Doolittle, for sometime our only Canadian member. He brought the international touch to the Association, but more than that, he brought himself. No one, I think, loved this Association more than Charlie did. He was present at the organizational meeting in Chicago in 1918. The fine qualities of Charlie's character; the gentleness of his manner and yet the firmness with which he dealt with questions of importance, endeared him to all of us. There are several men of his company here tonight and it was suggested to us that an old friend of ours, one whom we always delight to see with us, accept this tribute to Charlie Doolittle—Mr. Cunningham, will you please stand? [Applause.]

In the days when we seriously needed money to equip a laboratory and checks were being received in amounts of fifty, seventy-five and one hundred dollars, two men came to us and said they would jointly contribute \$5,000. to the laboratory fund. We accepted only a half of that amount as we felt that the laboratory should be built with funds that practically everyone had contributed. Neither of these men are living now. They were Arthur Lane and Lou Sporborg. Unfortunately there is no one here to represent Arthur Lane, but we have asked A. G. Seitz, who was established in business for a number of years with Lou, to accept the tribute which I know you will wish to give both of these men—Lou Sporborg and Arthur Lane. [Applause.]

At that first meeting in Chicago, as I have previously stated, we elected our first Treasurer. He is with us tonight. We haven't seen him so often in the past few years, but I am hoping that he may now

like us well enough again after tonight to come back with that degree of regularity which he always showed in the earlier years. Will you please stand and accept this tribute, Mr. A. J. Sullivan? [Applause.]

The second Treasurer of this Association, and please do not fear that I am going through a whole list of Treasurers, was elected at a time when we had to forego the services of Mr. A. J. Sullivan because he felt he could not continue any longer in that capacity. I recall very vividly that on the day of the election of this second Treasurer, a representative of a bonding company addressed the convention and in the utmost seriousness told us that bonding houses had found that the best risk was a bald-headed bachelor, and immediately thereafter James Savage was elected Treasurer. Will you stand, Jim? [Laughter and applause.] Jim amply confirmed the opinion of the bonding companies and he stands high in the esteem and affection of this Association.

When the officers of your Association, some fifteen years ago, took a swing around the country, in the hope that interest in the Association might be stimulated and financial revenue increased, they stayed for a while in California. It was there that we first met A. R. Wilson, and deeply enjoyed his gracious generosity. He joined the Association and thereafter came regularly to our conventions. He brought to us other members from California. He isn't with us, either, but he lingers affectionately in our memory. To such extent as we may, we console ourselves with the knowledge that his son is with us tonight. He has not attended a convention since the one in Detroit in '33, and I ask all of you to help in persuading Jeff Wilson to come back to us each year hereafter. Jeff, will you accept this tribute to your father—and keep some of it for yourself? [Applause.]

Also, in those early days when we needed money so badly to expand association activities we were fortunate in having the loyal devotion of a gentleman who was born in this City of Cincinnati. Over the years he worked his way down the Ohio River to the Mississippi; down the Mississippi, then back up that Father of mighty waters, and finally ended up in the northwest where he became extremely successful. Though he paid a substantial rate of dues to the Association, he felt that that wasn't enough. Sometimes, while at one of our conventions, his hand would slip into yours and you would find a little piece of crumpled paper therein, and he would say, "Don't turn that into the Treasury; spend it for something that you think the Association needs." The

check would be for anywhere from \$250.00 to \$500.00. This may sound material, but I cannot help mentioning it. Maybe you don't realize that I am referring to an old friend of all of us—John Wunder! He is no longer living but his work and aspirations are being efficiently carried on by his son-in-law, Mr. John C. Lauber. Will you stand, Mr. Lauber, and accept this tribute to your father-in-law—John Wunder! [Applause.]

I realize that the time is slipping by rapidly and I must shorten my remarks, but something should, of course, be said about the Manufacturers' Division. Certainly that Division has definitely and largely contributed to the growth and development of this Association. We remember that it was formed in 1922 in Chicago. The first Exposition was held in '23 in St. Louis. It was the "brain-child" of Mr. Greensfelder of the Hercules Powder Company. I hope that our many good friends among the explosives men will not mind my mentioning his company. Mr. Greensfelder worked against odds for the establishment of this Division. We were a little lukewarm about the plan at first, and yet I hardly know what we would do without this Manufacturers' Division. The expositions they hold at our annual conventions do much to increase attendance because of their instructive value.

During the first three years of the life of the Division, it was entirely separate from the Association. In fact they really had their own Association. Remembering the stigma which was placed upon the word "cooperation" this morning, when it is loosely used, I say it advisedly of the Manufacturers' Division as continuously cooperating with us, Colonel Chevalier. They were not seeking merely their own self-interest; they were trying to help us as well. In truth—"Cooperation." [Laughter.]

Now, towards the close of their autonomous existence, some of us began to get itching palms for their very substantial treasury, so we said to them—"Why don't you come in and be associate members of this Association—then you won't need a separate treasury?" [Laughter.]

Well, they said "all right, they would." Out of their treasury they spent several hundred dollars and bought a watch for "Rocky" who had been their Secretary. Then they said to us, "what shall we do with the remaining \$900.00?"—to which we replied, "We have five or six unfurnished rooms in Washington for our offices which badly need appropriate office furniture. Do you want to buy it?" They said, "Yes, they would." and so they did.

Now I am told by our new President, Mr. Andrews, that the Manufacturers' Division has presented this gavel which I am using now, and I observe that it is appropriately inscribed.

The first Chairman, Mr. Greensfelder, is not living, but the next Chairman is, and is with us tonight, and at some cost, I think, to himself. Physically, I am inclined to think he did not feel like attending this Convention but his heart was so definitely with us that he just couldn't stay away, and I want him to stand up so that we may pay tribute to the second Chairman of the Manufacturers' Division—W. E. Farrell, of Easton, Pennsylvania. [Applause.]

If anyone is in any doubt as to why this Manufacturers' Division has been successful, that doubt will be instantly eradicated from his mind when I ask all of the ex-chairmen of the Manufacturers' Division to stand collectively, and accept our tribute. [Applause.]

I cannot mention the Manufacturers' Division without thinking of a man who has been the stage director of their expositions for precisely ten years. He has done everything in handling the equipment and all the multiplicity of details connected therewith, that the Manufacturers' Division could expect, and then more besides. He has done everything that the active members could hope for, and more, and I think this night would not be complete unless we all, manufacturers and active members alike, told Mr. Shugg how much we appreciate what he has done, and also at this time, thank the General Electric Company for permitting us to have so generous a measure of his time. "Shuggie," will you stand? [Applause.]

I thought I would have, tonight, another ex-chairman of the Manufacturers' Division to present to you for a tribute, but I don't. The Division used its usual good judgment and re-elected the present Chairman. We want to assure him that we wish him all the success in the future that his administration has enjoyed during the past year. To you, Harper Fulkerson! [Applause.]

In conclusion as to the Manufacturers' Division, I must not fail to present one who has been intimately associated with it from its inception to the present moment. I have mentioned his name several times before because no, even brief, history of the Association could be given without referring to him numerous times. Modestly and effectively he has devoted himself and his time to the promotion of the best interests of the Manufacturers' Division and of this Association—Nathan Rockwood, will you stand? [Applause.]

Our first permanent secretary from April, 1918, until the late summer or early fall of 1925—A. P. Sandles—was a great man, and I say that advisedly. I do not have the time to say the many nice things about him that I would like to. All of us hold for him respect and affection. He is no longer living, but his assistant during those active years of his life was Claude Clark. Will you stand, Claude, and accept this tribute to—A. P. Sandles? [Applause.] I think, Claude, that some of this applause was meant for you, too. [Applause.]

My story is almost told, and I hope it hasn't been altogether uninteresting to you, but I cannot conclude without giving you, for your appreciation, as expressed at this moment, one of the greatest assets that this Association has ever had. I will not enlarge upon his fine qualities of character, or upon the quality of his work, because it is so obviously needless. This man has done for us far more than we ever expected, and has never, in one iota, jeopardized his professional standing. He is known now, as he was when we were fortunate in securing his services, so many years ago, as the outstanding testing engineer in the United States. I give to you, our own A. T. Goldbeck! [Applause.]

Nor can I conclude, without telling you that in the estimation of your Board of Directors and of the Executive Committee, and I think of every member of this Association, that we have one who stands high among trade association executives. Whenever we need any help from Washington, we phone Reg. When we need anything at this Convention, a call goes out for Reg. More than any other one man, perhaps, he is responsible for the smooth functioning of the Association and the attention to detail which makes our conventions so successful. He is not at one of these head tables only because, and this is typical of him, he is on the balcony at my left supervising the use of the spotlight. To our Administrative Director—Reg. Boyd! [Applause.]

One last word. In the early days of Association development, we tried, and with success, to bring in men to speak to us at our conventions who would broaden our outlook and conceptions. It wasn't always easy in the days of the youth of the Association, to secure such men and it hasn't always been easy even in the latter years. But there are three men with us tonight who have constantly contributed to our conception of the scheme of things, at some sacrifice of their own time. Surely, I should not let this occasion pass without all of us telling John Gall, Colonel Chevalier, and Charles Upham how glad we



are to have them with us again, tonight. [Applause.]

Mr. Rigg indicates to me that he wishes to speak to you for a moment.

PRESIDENT J. A. RIGG: Members of the National Crushed Stone Association, Ladies and Gentlemen, our Guests:—I owe an apology to Mr. Graves for my seeming rudeness in intruding myself into this program at this time. I say "seeming rudeness," because it is certainly startling, to say the least, and it puts the presiding officer of a banquet like this in somewhat of a dilemma for somebody to jerk his coattails and inform him that he wants to make a few remarks; but if my appearance at this time is untimely, the untimeliness is of this entire Association, for it is for this Association that I am speaking, and with pleasure.

I think you all recognize that there are some outstanding facts in connection with the history of this Association which have been omitted. In 1925 when this Association was in its growing youth, it elected to its presidency a young man of high capabilities, of personal charm, of vision, courage, and unbounded energy—the fundamentals of leadership which we find so rarely combined in one personality. Immediately upon his election, through time very generously granted by his employer, he threw himself into the task of materializing what was his vision of a National Association for the Crushed Stone Industry. Going from coast to coast, he successfully solicited membership. During his regime, as a part of his vision, there was established the Washington office, the Bureau of Engineering and the laboratory, and I have understood that he had a great deal to do with the securing of the addition to this Association of the Manufacturers' Division.

After his retirement from the presidency, he was elected to the Executive Committee on which he served continuously, giving unstintingly of his time and thought toward the improvement and the advancement of his Association. When the dark days of the depression came and membership wavered, and the income dropped, he refused to be pessimistic. He insisted that this Association should hold the ground it had gained, and that the Washington setup should be maintained intact. When the NRA loomed, he quickly analyzed its possibilities for benefit to this Association, threw himself into the task of assisting in the preparation of a code which was adopted almost without change, and quickly by the NRA, and he was chosen unanimously as Chairman of the Code Authority of this and our allied industries, the Sand and Gravel, and Slag Industries.

Since that time he has served continually on our Executive Committee, losing no opportunity, not only to present ideas for the improvement and advancement of the Association, but personally throwing himself into the active accomplishment of these ideas, and when danger has imperiled the interests of this industry, he has been instantly alert to its defense.

The fact that today this Association is outstanding in the trade Associations of the United States is in a large measure due to the fact that this man has loved this Association, and tonight it is one of the happiest moments of my life to pay a tribute to Otho Graves.

The audience arose and applauded. . . .

PRESIDENT RIGG: I have here a couple of messages which I would like to read to you at this time, with Mr. Graves' permission.

The National Crushed Stone Association,  
Netherland Plaza Hotel.

The officers and members of the National Sand and Gravel Association join me in sending warmest congratulations and best wishes upon the occasion of the celebration of the twenty-fifth annual convention of the National Crushed Stone Association.

(Signed) OTTO S. CONRADES,  
*President of the National  
Sand and Gravel Association.*

To the President of the  
National Crushed Stone Association,  
Netherland Plaza,  
Cincinnati.

Greetings to the National Crushed Stone Association on occasion of your Silver Anniversary Convention. Your Association has taken initiative and leadership in demonstrating the value of organized effort in behalf of the Industry, and in the public interest. The subjects to be considered at your current meeting show that you are well aware of the prime importance of efforts to solve the problems growing out of the war program. Accept our congratulations on constructive accomplishments of the Association and our best wishes for the success of this meeting.

Cordially,

ALBERT W. HAWKES,  
*President of the Chamber of  
Commerce of the United  
States.*

[Applause.]

We also have a message from the National Association of Manufacturers which will be personally delivered to you later. [Applause.]

MR. GRAVES: I hope that I do not need to tell you that Mr. Rigg's remarks were unknown to me; however, Mr. Rigg, I am most deeply grateful to you for your overly generous tribute to me, and to all of you for your constant friendship. Needless to say, Mr. Rigg owes no apology to me, nor to you for what he termed his intrusion into the planned portion of this evening. Because he is our President, as well as for himself, personally, he is always welcome and needed in whatever this Association undertakes.

EDITOR'S NOTE: *This concluded the ceremonial part of the Silver Anniversary Banquet program.*

## Warn Your Workmen Not to Leave Blasting Caps Around — They Are a Real Danger to Children

**E**ACH year there are numbers of children, under the age of sixteen, who are injured, and in some instances, killed, from playing with blasting caps.

In 1926 the Institute of Makers of Explosives, a trade association comprising manufacturers of commercial explosives, took the matter up and began a vigorous movement to arouse public sentiment in the hope that parents, teachers, and all others who had children in their care, would cooperate in safeguarding boys and girls by instructing them concerning the dangers of playing with blasting caps.

Reports show that the most common types of accidents are from striking the caps with a hammer or stone. Any blasting cap will explode if it is hit hard enough with such instruments. Accidents are caused in large measure also by holding lighted matches to the caps. Picking out the explosive with a pin or nail also causes many injuries.

Blasting caps are detonators used for firing high explosives. They are loaded with a very sensitive and powerful explosive. One type is a small metal cylinder closed at one end and usually made of copper, although other metals are also used. This type is designed to be exploded by sparks from a fuse.

Another type is known as an Electric Blasting Cap. This is also a metallic cylinder which may vary in dimensions and color. This type always has wires attached, sealed in with sulfur, rubber, or similar materials. A very small amount of current, even that supplied by an ordinary flash light battery, is sufficient to explode a single cap. Therefore, the wires from an Electric Blasting Cap may not be connected to a source of current without the danger of exploding the cap. Both types are also sensitive to impact with a hammer or stone and to fire applied to the metal cylinder.

These detonators are necessary in the use of dynamite. The caps get into the hands of children through the carelessness of users. Workmen leave them around following blasting operations. Sometimes they are carried home by workers and left about where children can find them.

Children and others inexperienced with explosives should not touch a blasting cap. It should be allowed to remain where found until an officer of the law or other responsible adult can be located.

## More Federal Highway User Taxes Recommended

**T**HE House Ways and Means Committee is considering Treasury proposals to double the Federal gasoline tax rate from 1½c per gallon to 3c per gallon and to boost the Federal lubricating oil tax from 4½c per gallon to 10c per gallon. Approximately 90% of the total gasoline consumption and 80% of taxable lubricating oils are used in motor vehicles.

Treasury tax proposals also would increase the present 5% tax on all passenger transportation (including buses) above 35c to 15% on transportation tickets and 20% on seats and berths. The recommendations also call for an increase of from 4½% of the amount paid to 10% of the amount paid for transportation of petroleum products by pipe line.

Yield of the Federal gasoline tax next year would be increased approximately \$242,200,000 over returns from the present rate, according to Treasury estimates. The increased lubricating oil tax is expected to boost revenues about \$49,900,000 above returns from the present rate next year.



# Quarrying Priorities<sup>1</sup>

By DR. WILBUR A. NELSON

Administrator of Mine Priorities, War Production Board, Washington, D. C.



**M**R. PRESIDENT, Members of the National Crushed Stone Association, and may I also say some of my very old and dear friends from Tennessee and Virginia whom I see in the audience, I would like first to comment, if I may, on the report of your research work accomplished during the past year. It is certainly a magnificent program for an Association, and I know that you feel proud of the

work being done along that line.

A few days ago one of my friends came back from Texas where he had made a talk to a group of technical men. He was asked what kind of talk he made, and he said that his friends in Texas told him that it was what they called a longhorn talk, and he said, "What kind of a talk is that?"

"Well," they said, "it is a talk that has two points a long way apart, with a lot of bull in between."

I hope that I will make more than two points, and that there will be very little "bull" between.

First let me say that there has been no change in the operation of the Mining Section or Branch due to the reorganization, except that we will probably have more work to do and a little more authority.

Furthermore, in order to stop any questions before they are asked in regard to prices, let me say that the Mining Branch has nothing to do with prices in regard to the mining industry or to metals; not that we should not have something to do with it, but as it stands today prices do not come within our jurisdiction.

Those things which come first must rank first under our present program, and it is our position in the Mining Branch that mines, mining machinery, and munitions are on a definite parity and must all get the same treatment; because if the same treatment is not given to the operators of mines and makers of

- Since the presentation of Dr. Nelson's discussion, P-56 has been basically amended, substantially changing the procedure as outlined herein. However, Dr. Nelson's observations as to policy continue to be of the utmost importance and should be thoughtfully studied by all crushed stone producers.

mining machinery as is given to the makers of munitions, the President's program cannot succeed. I expect it to succeed, so you can see that I expect, so far as I have any ability to do so, to see that mining and mining machinery get the same treatment as munitions. And that stands for everyone in our Branch.

We are administering, in the Mining Branch, three orders. These orders are P-56, which is known as the Mining Order; the order P-56-a which is known as the Mining Machinery Order; and Order P-73 which is the Smelter Order. I doubt if you have much interest in the Smelter Order, but you have a great deal of interest in the other two orders, so I will go into considerable detail in discussing how we are administering Order P-56 and Order P-56-a.

In Order P-56, we have certain fixed priority ratings. They are as follows: We can grant an A-1-a rating which is the highest rating that can be given by anyone except the Army and Navy; we can grant this rating to any operator of a mine when that mine has a serial number, if they have a breakdown of any part of their equipment, provided they wire to our Branch in Washington and give us substantiating details. In such a wire, you should give us the serial number of your mine, the order on your supplier, and what damage the breakdown is causing. For instance, you should show that due to the breakdown, your tonnage has been decreased so much per day; and also, it is helpful to show how many man-hours are being lost. I believe that in practically all cases where anyone has furnished us all of the needed information, we have gotten back to him the same day a wire authorizing that high rating on his supplier.

If you have an anticipated breakdown, or as we are prone to call it, you need some emergency inventory, we can grant you an A-1-c rating on any such items. We generally do that by telegram if you start it by telegram. Again, you must give us the same type of information as you would in the first case where you have an actual breakdown. You should show that the items needed are to replace items that

<sup>1</sup> Presented at the Twenty-Fifth Annual Convention of the National Crushed Stone Association held at the Netherland Plaza Hotel, Cincinnati, Ohio, February 2-4, 1942.

have either broken and been repaired, and are known to have a very short life; or that they are to replace items which, in your general mining practice, you know can last only a few weeks longer.

The other ratings which we give in the Mining Order are A-3 ratings for machinery, new machinery, and A-3 ratings for repair parts for machinery listed in Schedule A of our Order P-56. Schedule A is a list of all mining machinery, and I say "all machinery" because no one has so far been able to find any item in the category of mining machinery that is not covered by that list. But if any of you present can find some item of mining machinery not covered by that list, we can, I believe, get it added to the list by an amendment.

For a further discussion of how mining machinery and repair parts can be obtained, I will give you the following details. If you wish repair parts for any machine listed in Schedule A, you order it directly from your supplier in the same way you would order anything that you ordered before priorities went into effect, with this exception, that you stamp on your order the clause in Order P-56 which states that the serial number of your mine is so-and-so, and that you are ordering this on an A-3 rating in accordance with the provisions of Order P-56. As I say, you send that order directly to your supplier. Your supplier can extend that A-3 rating on his supplier if necessary to get that part for you.

In this way, we feel that, in most cases, any operator having a serial number can obtain needed repair parts for mining machines he is operating. Furthermore, at the end of each month, each mine operator must send in to the State Coordinator in his state, on Form PD-119, a list of all such rated purchases he makes for repair parts. He must also, on this same form, list any A-1-a ratings he has obtained, or any A-1-c ratings; and finally, he must list any A-8 ratings which he obtains, which ratings I will explain in a few minutes.

Before leaving the A-3 ratings, I should go back and tell you how A-3 ratings can be used in ordering new machinery. In the first place, no mine operator can order a new machine today until it is approved by the Mining Branch in Washington. Now, that may seem to you rather dictatorial and usurping some of the rights that an American citizen has always had. I don't think that anyone in our Branch likes the idea of having to say to anyone in industry, "You have to see us before you can get a machine," but we also don't like the knowledge that we can't get any more chrome from the Philippine Islands, that we can't get

any manganese from many other places, and that we may have all of our tungsten cut off from the Burma Road, and that many of the most important ferrous alloys used in the making of machines used by you gentlemen are not available to us. We have only limited amounts of those materials, and so it is necessary for us, if we are going to do our part in winning this war—and we certainly are going to do so—to see that the materials which we do not have in sufficient amount to go around, go to those mine operations which are most essential in winning the war; and so that is the reason why you have to get the approval of the Mining Branch on every new machine that you buy from now on.

I will be frank and state that we will be unable to approve new machines for any mine where it is not proven that the output of that mine is essential for our war efforts. In the past few months, we have been rather lenient and we have granted ratings for new machines to operators who showed that they had defense contracts; but showing that you have defense contracts will not give us the picture we need in the future. If you wish to buy a machine that has a life of fifteen or twenty years, or ten years, and you can only show that you have defense contracts that will be good for the next three or four months, you are going to have a very small chance of getting that new machine, as against some other operation where that machine will be used through its entire life on some phase of mining essential for winning the war.

Now, what the answer will be, and how we can handle these serious problems, is something that has not been worked out in detail, but there is bound to be an answer, and there is only one way we can get that answer, and that is by full cooperation between groups such as yours and our group in Washington. We don't know the answer. I doubt if you know the answer, but by working together we can certainly get the right answer, because we are working for just one definite cause and one aim, and that is winning this war as promptly as possible.

I doubt if everyone here realizes the seriousness of our shortage in many of the ferrous alloys that are essential in war machines, and also essential in mining operations, and we must look at this picture from an all-over standpoint.

In addition to the A-3 ratings that I have mentioned, we have an A-8 rating in this setup on which you can buy supplies, materials and machines, if the machine is not listed in Schedule A—but remember, I don't believe you are going to find any machines that are not listed Schedule A. So your A-8 rating

is really for supplies that you do not need a higher rating for, such as powder and fuses, if and when the time comes that you have to have a rating to buy them.

That is a summary of our Mine Order P-56, which you will see takes care of all of the needs of a mine operator. It takes care of his machines, his repair parts, his maintenance and supply items—everything which he needs on which to operate. We hope that we can meet your needs as nearly 100 per cent as possible; we know that we can't, but we will do the best we can.

I have left to the end of the discussion of this Mine Order, the statement as to how you get a serial number. I imagine that most of the operators here already have serial numbers. The procedure is as follows: We have requested the Governor of each state to designate a state official to act as our Emergency Coordinator of Mines for that state. In 90 per cent of the cases, the Governors of the different states have appointed an official engaged in some phase of the mining industry in the state. In a few cases, the Governors, for some reason, did not make such an appointment. The State Emergency Coordinator of Mines sends in to our office a list of all mines in his state which it seems to him should have a serial number, and we go over that list, and if each one of the mines so listed appears to be large enough and producing sufficient tonnage to need these blanket ratings which such a mine can get under Order P-56, we then grant that mine a serial number. The number is a dual number. The first number represents the order in which that state entered the Union; there is a dash after that number, and then the second part of that number is the serial number in order of application of that particular mine operator in that state. If you are from Pennsylvania, your first number would be 2, with a dash, and so on; and there are over 1,000 mines that have been given serial numbers in Pennsylvania. In Delaware, I think we have given two numbers. There are the two extremes.

Now, you might wish to know what is considered a mine. We consider a mine or a mine operator under our Order P-56 as anyone who is removing any mineral from the earth. In other words, in addition to metal mines and coal mines, we consider coal stripping operations in this category; we consider all crushed stone operations, sand and gravel operations, clay pits and phosphate pits in this category, and even the Dow Chemical Company's plant which is getting magnesium from the sea water from the Gulf of Mexico. We consider the solar evaporation plants

producing salt in the San Francisco Bay Region as mines. Now, all such mines may not receive numbers, but we are giving numbers to those worthwhile operations.

Of course, the small operator feels that we are discriminating against him, but please let us remember this fact, that no blanket rating will help anyone if you spread it too thin, and the idea is to give relief to the mine operators which are producing the great percentage of our essential materials, and we can't give them that relief under this order if we spread the order over every hole in the ground. A very small operator or a person producing a small tonnage can still get priority relief through Order P-100, which gives him an A-10 rating for the few items he may need; and if he cannot obtain what he needs under P-100, he can always go to that catch all of everything in WPB, our PD-1 form, of which you fill out several copies and request a priority rating on a specific item on a definite supplier. We are always ready to help the small operator in getting any specific item he actually needs if he will send us in a filled-in PD-1 form. So, if anyone says to you that we are discriminating against the small operator and are refusing to give him priority assistance, I hope you will work with us in explaining to him that that is not true. We are just giving him a different type of priority assistance which we feel is all that he needs.

Leaving Order P-56, we come to our Mining Machinery Order, P-56-a, which takes the place of the old Mining Machinery Order, P-23. Those makers of mining machinery who are present operated, many of them, under P-23 until the 1st of January. Since the 1st of January, it is illegal to operate under P-23. They must now operate under P-56-a, and must send in a request to operate under it, showing their inventory on hand at a certain date, and also showing in detail what raw materials they need for the first and second quarter of this year; or if they wish, they can show it for just one quarter. We will then give them an A-3 rating which they can use for their anticipated demands of raw material for the making of mining machinery.

While I am discussing the Mining Machinery Order, I must go back for a moment to the Mine Order, because the two are very closely interlocked. Our Mine Order, when it was amended in December to give an A-3 rating for new machinery, permitted, for the first time, a mine operator to call on his corner machine shop, or blacksmith shop (if we have any left), and ask him to make one particular machine for him, if that is all he wanted; and the mine



operator could extend his A-3 rating to his corner machine shop or corner blacksmith shop, and that shop could then extend that rating on his supplier to get the small amount of material which he would need to make one machine or a few repair parts for that individual mine.

Before the Mine Order was amended in December, the small shop near a group of mines had no way in which he could get material under a priority rating, with which to make one or two machines or a few repair parts for the mines that he had serviced in that way for many years. He can do it today.

The big maker of mining machinery can get taken care of by having his advance needs listed and he gets them under an A-3 rating under the Mining Machinery Order which is P-56-a. I hope that I have given you those details slowly enough so that they are clear to you.

The mining machinery makers today represent the most critical point of the whole mining picture, and unless something is done to protect the makers of mining machinery—and done promptly—we are going to find that the mining industry will not have the machines with which to operate during the war. The seriousness of the situation can best be shown as follows: Most of these large makers of mining machinery have manufacturing plants in which are machines of the very type that are wanted by the machine tool makers on one hand, and the munition makers on the other hand, because your makers of mining machinery have the precision tools to do the precision work wanted by the makers of munitions. Your makers of munitions have an A-1-a rating which they can extend on the maker of mining machinery. The makers of machine tools can extend an A-1-a rating on the maker of mining machinery, and the mine can extend only an A-3 rating on the maker of mining machinery for making what the plant was designed to make. Do you see the point? On both sides, you have an A-1-a rating just squeezing all the A-3 ratings out, so that your maker of mining machinery either will have to go out of making mining machinery or go out of business; so what is he going to do? He is going to take munitions orders unless something is done to stop him, and it is a very serious situation.

When I spoke here last Thursday, the situation was just as serious as I describe it to you. Since Thursday—I might say on Saturday—I was fortunate enough to get a ruling from those higher up in the War Production Board, in one particular case only (which was a very sore spot), in which this company was

told that they must furnish and make so many parts for mining machines every month from now on, and that if they met with any criticism or disapproval of this program from any of the people with whom they had munition contracts or machine tool contracts to request such parties to come to Washington and discuss the matter with us.

Now, that is just a small straw, but I believe that is the beginning of action which will save the makers of mining machinery so that they will not be forced to sell the mining industry short. Please understand that the makers of mining machinery do not want to sell the mining industry short; it is the last thing they want to do. We have had a representative group from this industry in Washington, in my office, almost continuously for the last seven or eight days, working 100 per cent with our group in attempting to work out a solution to this very serious matter, and I can assure you gentlemen here today that I have been assured, in turn, that we will have a definite "yes" or "no" on this whole mining machinery situation by the end of this week; and personally, I feel that it is going to be a "yes," but how we can work out the details, I do not know.

I should say that you may not realize that today we have to furnish mining machines for practically the entire world not covered by the Axis. We have requests for machines from Canada, Central and South America, Australia, India, Saudi Arabia, and all over Africa. The makers of mining machinery in this country must keep the mines of the world going where those mines are sending to this country or to England the raw materials necessary for making the implements of warfare with which we will win this war. That is a big problem, it is one of the biggest problems we have, and we cannot solve it properly unless we all work together.

I hope I have not burdened you with too much detail, and to perhaps leave you in a little less serious frame of mind, I would like to tell you a short story embodied in a letter I received in 1918, when I lived in Tennessee. It came from a fellow Tennessean who lived way up in the mountains, and he wrote on a piece of scratch-paper, "I have a mind"—m-i-n-d—"and I don't know how to use it." Well, I hope none of us will be in that situation, because we can't afford to be.

**PRESIDENT RIGG:** Before we proceed with the questions, I wish to present to the convention, Mr. Edward W. Bauman, who, as I stated before, is the Technical Adviser to Dr. Nelson on non-metallics. Mr. Bauman! [Applause]



MR. E. W. BAUMAN: I have nothing to add to what Dr. Nelson has said, but I am here to serve you gentlemen in answering any questions which you may wish to ask.

PRESIDENT RIGG: We are going to have open discussion right now, Mr. Bauman, as far as time will permit; and then I also understand that you are going to place yourself at the disposal of the individual members.

MR. BAUMAN: I shall be glad to take over and do whatever I can, so let us have an informal discussion. Make yourselves feel that you are a part of this, and if you have questions in mind now that would contribute to the good of all of us, I think now is the time to bring them up. Then, if any of you have problems that are pertinent to your own operations, to save time, this afternoon and tomorrow I will be available for discussion with you individually.

MR. RUSSELL RAREY (Marble Cliff Quarries, Columbus, Ohio): Mr. Bauman, this is a matter of general interest, I think, which has to do with Order P-56. Schedule A, presumably, at least, lists all the mining machinery and equipment. Will you give us in a little greater detail, then, the procedure to secure the A-3 rating as compared with the A-1-a or A-1-c? Dr. Nelson spoke first of the A-3 rating for new machines, and then he spoke of the A-1-a or A-1-c rating for parts not in Schedule A, and he said that everything is listed in Schedule A. That doesn't deny the right, does it, to make application for an A-1-a or A-1-c if conditions justify or merit it?

MR. BAUMAN: The question asked was, what was the procedure for making application for equipment or repair parts on the A-3 rating. There seemed to be a question as to the fact that A-1-a and A-1-c provided ratings for equipment listed on Schedule A. How would one proceed in securing ratings for equipment not on Schedule A?

MR. RAREY: No, that wasn't my question? There is no equipment that doesn't appear on Schedule A. That is the assumption, at least.

DR. NELSON: I didn't say that. I said we thought we had everything on Schedule A—everything in the line of mining machinery. All mining machinery is on Schedule A, but there may be a number of things you need in the mine that are not on Schedule A.

MR. RAREY: Assume it is machinery that does appear on Schedule A; does the fact that the equipment is listed on Schedule A deny the operator the privilege of applying for a rating of A-1-a or A-1-c?

MR. BAUMAN: The A-1-a rating, as was stated, is intended for a mine breakdown and to secure the

necessary repair parts; and I say "necessary repair parts," because if it is a breakdown, it is not likely that it would involve a new piece of equipment. The A-1-a rating is intended to secure relief to the operator in securing repair parts for his equipment, whether they are listed in Schedule A or not. The same is true of A-1-c. When the original order was drafted, considerable thought was given to the equipment that would be listed in Schedule A, and as Dr. Nelson stated, there is very little that is not included; but to answer you definitely, the operator has the privilege of applying for the A-1-a or A-1-c rating, regardless of whether the equipment is listed or not.

MR. H. E. COLEMAN (LeRoy Lime & Crushed Stone Corp., LeRoy, N. Y.): Mr. Bauman, no mention has been made of the inventory paragraph in these preference rating orders. Is it felt that it might be desirable for a mine operator engaged in essential war production possibly to exceed in certain items the inventory requirements?

MR. BAUMAN: The rating of A-1-c is intended for emergency inventory, providing the operator with a means of securing supplies to avoid unnecessary breakdown. That, of course, is obtained by making application to the Washington office. The A-3 rating is intended to provide the operator with the so-called working inventory, and there of course we are relying on the integrity and the fair play of the operator in ordering his equipment, to maintain a reasonable inventory.

The order does provide, however, that this so-called inventory production ratio shall not exceed that of the years 1938, '39 and '40. Those were very good years for the mining industry, and particularly for this group; so that appears to be a reasonable basis on which an operator should build up his inventory.

Dr. Nelson failed to state that arrangements are now under way for having field representation of the Mining Branch. He stated it last week, and possibly had in mind later on in the discussion to make mention of that point. It will be the purpose of the field operators, in addition to extending the service of the Washington office, also to make a check on flagrant violations. How the violations will be called to the attention of the field service or to our office is something that still remains to be solved, but as you know, those things have a way of getting around.

PRESIDENT RIGG: I would like to ask one question in connection with inventories. You have taken as a basis, the inventories carried in '38, '39 and '40. In our own particular case—I am drawing from the experience in our own operations—in the early part of

the period covered by those years, when it was easy to buy gears and to buy all kinds of machinery parts, we didn't pay so much attention to rehabilitation. Now we are rehabilitating a great many of our machinery parts through the process of welding. We have trebled the number of welding machines which we have in our shop, and consequently, we have materially increased our inventory of welding rod. Would you consider that justifiable? Isn't that fitting into the spirit of this priority program?

MR. BAUMAN: Mr. Rigg, we feel that the operators are going to have to help themselves more and more, and certainly through the use of your mechanics and machine shops, quite likely in many instances you will be able to help yourselves, when the easier course might be to get new equipment and resupply your inventory.

In direct answer to your question, I would say that is definitely in the spirit and intent of the program, that we have before us.

DR. NELSON: I might add to what Mr. Bauman has said in regard to that, that if there is any doubt in the mind of an operator that his change of method of operation requires a larger inventory now than the average, let him write to us and we will give him the necessary relief, because we have the right to give relief where any provision of P-56 is working a hardship. I think what Mr. Bauman said is correct.

MR. HARRY H. BRANDON (Melvin Stone Company, Melvin, Ohio): I am not sure my question is entirely in order. We are operating on a defense project now requiring motor trucks to make delivery. The tire quota of our county and the adjoining county that is furnishing most of these trucks is not sufficient to maintain 100 trucks in operation, and the question arises as to whether relief in the matter of tire supply will come under this heading.

MR. BAUMAN: Dr. Nelson indicated he had something new on that, and we will be glad to have it.

DR. NELSON: On Saturday, we were able in Washington finally to get a statement on the tire situation from the tire group, and as Mr. Bauman does not know about this, I will answer this question for him. That shows you how rapidly things move.

If your County Tire Rationing Board will not give you the tires needed for moving raw materials from the mine in a mining operation that comes under P-56, and if they tell you they can't give them to you, you immediately get in touch with us; but they should write or wire or telephone the State Board, because the State Board has an 8 per cent kitty to be used for such purposes. If the State Board won't

do it, you can then come into Washington where the tire group in Washington have a 2 per cent kitty of the entire United States quotas, to be used for that purpose.

It just seems that in building up this tire rationing program, that most of the County Boards have never read the book of instructions that was sent to them, and all of those things are in the book of instructions. On Saturday, we contacted the man who wrote the book, and who understands the book; it is all in the book and if you will read that book thoroughly, you will see there is a paragraph on people who need tires for moving mineral production.

MR. BRANDON: Does that include the delivery of the mine product? This is a case where a cartridge loading plant is being built thirty miles from our plant, and our problem is the supply of tires for the trucks making that delivery from our mine to the munitions plant over the public highways.

DR. NELSON: That is to carry your product to your customer?

MR. BRANDON: That is right.

DR. NELSON: That does not come under the Mine Order, but if you will get the pamphlet gotten out by the Tire Rationing Board and read it carefully, I wouldn't be surprised if you were to find a paragraph in there that would take care of that.

MR. BRUCE S. CAMPBELL (H. T. Campbell Sons Corporation, Towson, Md.): Are they your own trucks or hired trucks?

MR. BRANDON: Hired trucks.

MR. CAMPBELL: That is the problem we have; we use a lot of hired trucks.

DR. NELSON: When you get into delivery of the mine product to your customers, that is beyond the limits of our Mine Order, and our Mining Branch can't help you on that because we have no authority after the material leaves the mine. You will have to get that from some other branch in WPB.

MR. M. E. McLEAN (E. St. Louis Stone Company, E. St. Louis, Ill.): A contractor doing a defense job, and whom you are supplying, has an A-1-a rating. Your plant has a breakdown and the delivery can't be made on schedule. Is it permissible for that contractor to extend his rating to the suppliers to secure the machinery necessary?

MR. BAUMAN: You are bringing up a question that falls, not under Order P-56, but rather it is a question with regard to a rating that is granted under some order other than P-56, but I shall be glad to attempt to give you an answer, and I believe I may clear up some misunderstanding that has existed

with regard to the extension of so-called ratings obtained from projects. As a matter of fact, in talking to the mine equipment manufacturers the other morning, Dr. Nelson made clear the so-called illegal extension of ratings thus obtained. It is the responsibility of the equipment manufacturer to determine whether the rating has been properly extended. Of course, if the mine operator—the quarry operator—has a rating on a so-called Construction Quartermaster project, he might extend the rating that was given him and get the supplies; that is, so far as he is concerned, well and good. But the equipment manufacturer, on the other hand, has perhaps delivered repairs or equipment on a rating that has no status. As a matter of fact, you will find that the PD-3's which are a rating by the Army and Navy, issue a rating to the contractor doing that particular piece of work, or a particular project. If the contractor elects to give to his subcontractors ratings, the fact that he extended the rating to them does not authorize the subcontractor to re-extend that rating.

MR. McLEAN: This is what I intended to ask. To use an example, in St. Louis at the ordnance plant, the Quartermaster was doing the construction work and supervising the construction work of the contractor. The contractor had issued to us a PD-3 for a crusher shaft. Were we within our rights in asking the contractor to go to the Quartermaster Corps and ask them to give us a PD-3?

MR. BAUMAN: Yes, entirely, because in that case quite likely the military officer could issue a rating on you to receive that part.

MR. CHARLES COBURN (Carbon Limestone Company, Hillsville, Pa.): Is there any chance that these monthly reports that we have to turn in to the State Coordinator can be simplified and condensed in any way? It takes an awful lot of time to itemize little articles on that, and probably you will never read those itemized reports.

MR. BAUMAN: Well, that question is in order. It is not the intent of the Mining Branch to impose undue hardships in the way of reports on the mine operators. However, operating as we do, as you realize, centralized in Washington and attempting to control all the operations of the mines in this country—not only the sand and gravel and the crushed stone and slag, and so on down the line, but the entire mining industry—operating as we do from a central office in Washington, with no more check than we

have in the field on the administration of these operations, we must have some form of reporting as our only check.

We have given considerable study to the method of reporting, and while the complaints are few—and I don't regard your question as a complaint—while in the main the complaints are few as regards the hardship imposed, the form as now set up, as an instruction sheet, seems to get what we want with the least amount of effort on your part.

I might say, while we are discussing PD-119, that quite frequently the operators write in to the Washington office and ask for fifty, sixty or one hundred copies of the form, in order to serve their use in reporting to the State Mine Coordinator. The form as it is developed in the Washington office is primarily an instruction sheet, indicating to you gentlemen the way in which the reports are intended to be completed, and they are not available for your reporting purposes. Consider them as instruction sheets to be used by you for the manner in which to list the report of the equipment and supplies obtained. You may reproduce them to suit your conditions. If you have a large list to report, naturally, you will want to have a longer sheet than is provided on the form PD-119 as we sent it out. If you obtained no supplies or equipment for the month, you must report to the Coordinator, none the less, stating that no supplies were obtained. That keeps you in what the librarian calls active circulation. If you have a particular grievance, we would entertain suggestions for its revision, but to get the information that we want as of now, we feel that the form as developed is essentially satisfactory.

---

## Silver Anniversary Convention

(Continued from page 14)

greatly indebted to the members of the various convention committees, to the presiding officers, and to those in our own ranks who gave papers before the Convention.

The difficult task of setting up and dismantling the Exposition was again effectively handled by L. W. Shugg, Director of Exhibits, and for his services in connection with the Exposition we are most grateful. It is also appropriate to express appreciation to the General Electric Company for their courtesy in permitting Mr. Shugg to act as Director of Exhibits.

**MANUFACTURERS' DIVISION**  
of the  
**NATIONAL CRUSHED STONE ASSOCIATION**

These associate members are morally and financially aiding the Association in its efforts to protect and advance the interests of the crushed stone industry. Please give them favorable consideration whenever possible.

**Allis-Chalmers Mfg. Co.**

Milwaukee, Wis.

*Crushing, Screening, Washing, Grinding,  
Cement Machinery; Motors; Texrope  
Drives; Centrifugal Pumps; Tractors*

**American Cyanamid & Chemical Corp.**

Explosives Department  
30 Rockefeller Plaza, New York, N. Y.  
*Explosives and Blasting Supplies*

**American Manganese Steel Division of the  
American Brake Shoe and Foundry Co.**

389 E. 14th St., Chicago Heights, Ill.  
*Manganese Steel Castings, Renewable Lip  
Dippers*

**The American Pulverizer Co.**

1249 Macklind Ave., St. Louis, Mo.  
*Manufacturers of Ring Crushers and Ham-  
mermills for Primary and Secondary  
Crushing*

**Atlas Powder Co.**

Wilmington, Del.  
*Industrial Explosives and Blasting Supplies*

**Earle C. Bacon, Inc.**

17 John St., New York City  
*Primary and Secondary Crushers, Rolls,  
Screens, Elevators, Conveyors—Complete  
Plants designed and equipped*

**Barber-Greene Company**

Aurora, Illinois  
*Portable and Permanent Belt Conveyors,  
Belt Conveyor, Idlers, Bucket Loaders  
both Wheel and Crawler Mounted, As-  
phalt Mixers and Finishers, Coal Hand-  
ling Machines*

**Brooks Equipment and Mfg. Co.**

408-10 Davenport Road, Knoxville, Tenn.  
*"Brooks Load Luger" (Stone Hauling  
Equipment). DAY Jaw Type Rock Crush-  
ers. DAY Pulverizers, or "Swing Ham-  
mer" Crushers*

**C. G. Buchanan Crushing Machinery Divi-  
sion of the Birdsboro Steel Foundry and  
Machine Co.**

90 West Street, New York City  
*Primary, Secondary and Finishing Crushers  
and Rolls*

**Bucyrus-Erie Co.**

South Milwaukee, Wis.  
*Excavating, Drilling and Material Handling  
Equipment*

**Cross Engineering Co.**

Carbondale, Pa.  
*Screen Plates and Sections, Perforated Plate,  
for Vibrating, Rotary and Shaking Screens*

**Deister Machine Company**

1933 East Wayne Street, Fort Wayne, Ind.  
*Deister Plat-O Vibrating Screen, Deister  
Compound Funnel Classifier*

**Diamond Iron Works, Inc.**

Minneapolis, Minn.  
*Rock Crushing, Conveying and Transmis-  
sion Machinery*

**E. I. du Pont de Nemours & Co., Inc.**

Wilmington, Del.  
*Explosives and Blasting Accessories*

**Dymonhard Corporation of America**

250 West 57th St., New York City  
*Hard Facing Welding Rods*

**Easton Car and Construction Co.**

Easton, Pa.  
*Quarry Cars, Truck Bodies and Trailers  
Electric Heaters for Tar, Asphalt or Bitumen*

**Ensign-Bickford Co.**

Simsbury, Conn.  
*Cordeau-Bickford Detonating Fuse and  
Safety Fuse*



## MANUFACTURERS' DIVISION of the NATIONAL CRUSHED STONE ASSOCIATION

### **Frog, Switch & Mfg. Co.**

Carlisle, Pa.

*Manganese Steel Department—Manufacturers of "Indian Brand" Manganese Steel Castings for Frogs, Switches and Crossings, Jaw and Gyratory Crushers, Cement Mill, Mining Machinery, etc., Steam Shovel Parts*

### **General Electric Co.**

1 River Road, Schenectady, N. Y.  
*Electric Motors*

### **Goodyear Tire & Rubber Co.**

Akron, Ohio

*Belting (Conveyor, Elevator, Transmission), Hose (Air, Water, Steam, Suction, Miscellaneous), Chute Lining (Rubber)*

### **Gruendler Crusher and Pulverizer Co.**

2915 N. Market St., St. Louis, Mo.  
*Rock and Gravel Crushing and Screening Plants, Jaw Crushers, Roll Crushers, Hammer Mills, Lime Pulverizers*

### **Hardinge Co., Inc.**

York, Pa.

*Scrubbers, Pulverizers, Dryers, Feeders, Classifiers, Washers, Thickeners*

### **HarriSteel Products Co.**

420 Lexington Avenue, New York, N. Y.  
*Woven Wire Screen Cloth and Abrasion Resisting Products*

### **Hayward Co.**

50 Church Street, New York City  
*Orange Peel Buckets, Clam Shell Buckets, Drag Line Buckets, Electric Motor Buckets, Automatic Take-up Reels*

### **Hendrick Mfg. Co.**

Carbondale, Pa.

*Perforated Metal Screens, Perforated Plates for Vibrating and Shaking Screens, Elevator Buckets, Hendrick Vibrating Screens*

### **Hercules Powder Co.**

Wilmington, Del.  
*Explosives and Blasting Supplies*

### **Illinois Powder Mfg. Co.**

124 N. 4th St., St. Louis, Mo.  
*Gold Medal Explosives*

### **Iowa Manufacturing Co.**

Cedar Rapids, Iowa

*Rock and Gravel Crushing, Screening, Conveying and Washing Plants, Hot and Cold Mix Asphalt Plants, Stabilizer Plants, KUBIT Impact Breakers, Screens, Elevators, Conveyors, Portable and Stationary Equipment.*

### **Kennedy-Van Saun Mfg. and Eng. Corp.**

2 Park Ave., New York City

*Material Handling Machinery—Crushers, Pulverizers, Vibrating Screens*

### **Kensington Steel Co.**

505 Kensington Ave., Chicago, Ill.

*Manganese Steel Castings, Dipper Teeth, Crawler Treads, Jaw Plates, Concaves and Hammers*

### **Keystone Driller Co.**

Beaver Falls, Pa.

*Drills, Power Shovels*

### **The King Powder Co., Inc.**

Cincinnati, Ohio

### **Koehring Co.**

3026 W. Concordia Ave., Milwaukee, Wis.

*Mixers, Pavers, Shovels, Cranes, Draglines, Dumpers, Traildumps, Mud-Jacks*

### **Kraft Bag Corporation**

630 Fifth Ave., New York City

*Multi-Wall and Heavy-Duty Paper Sacks, both Valve and Openmouth*

### **Lima Locomotive Works, Inc.**

Shovel and Crane Division

1108 Lima Trust Bldg., Lima, Ohio

*Power Shovels, Draglines and Cranes*

### **Link-Belt Co.**

300 West Pershing Road, Chicago, Ill.

*Complete Stone Preparation Plants. Conveyors, Elevators, Screens, Washing Equipment, Speed-o-Matic Shovels—Cranes—Draglines and Power Transmission Equipment*

### **Ludlow-Saylor Wire Co.**

Newstead Ave. & Wabash R. R., St. Louis, Mo.

*Woven Wire Screens and Wire Cloth of Super-Loy, Manga-Loy and all commercial alloys and metals*

### **Marion Steam Shovel Co.**

Marion, Ohio

*A Complete Line of Power Shovels, Draglines and Cranes*

### **McLanahan & Stone Corp.**

Hollidaysburg, Pa.

## MANUFACTURERS' DIVISION of the NATIONAL CRUSHED STONE ASSOCIATION

**The National Supply Co. of Delaware.**  
**Superior Engine Division**  
 1401 Sheridan Ave., Springfield, Ohio  
*Diesel Engine Equipment*

**Nordberg Mfg. Co.**  
 Milwaukee, Wis.  
*Cone Crushers, Vibrating Screens, Diesel Engines, Steam Engines, Compressors, Mine Hoists, Underground Shovels, Track Maintenance Tools*

**Northern Blower Co.**  
 65th St. South of Denison, Cleveland, Ohio  
*Dust Collecting Systems, Fans—Exhaust and Blowers*

**Northwest Engineering Co.**  
 28 E. Jackson Blvd., Chicago, Ill.  
*Shovels, Cranes, Draglines, Pullshovels*

**The Osgood Company**  
 Marion, Ohio  
*Power Shovels, Draglines, Cranes*

**Parsons Engineering Corp.**  
 3599 E. 82d St., Cleveland, Ohio  
*Dust Collecting Systems: Fans, Hoods and Blow Piping*

**Pioneer Engineering Works, Inc.**  
 1515 Central Avenue, Minneapolis, Minn.  
*Jaw and Roll Crushers, Vibrating and Revolving Screens, Scrubbers, Belt Conveyors, Traveling Grizzly Feeder*

**Pit and Quarry Publications**  
 538 South Clark St., Chicago, Ill.  
*Pit and Quarry, Pit and Quarry Handbook, Pit and Quarry Directory, Concrete Manufacturer, Concrete Industries Yearbook*

**Robins Conveying Belt Co.**  
 Passaic, N. J.  
*Belt Conveyors, Bucket Elevators, Gyrex and Vibrex Screens, Feeders, Design and Construction of Complete Plants*

**Rock Products**  
 309 West Jackson Blvd., Chicago, Ill.

**Ross Screen and Feeder Co.**  
 19 Rector St., New York City  
*Ross Patent Chain Feeders for Feed Control of All Sizes Rock, Ores, Gravel, etc.*

**Screen Equipment Co.**  
 9 Lafayette Ave., Buffalo, N. Y.  
*SECO Vibrating Screens*

**Simplicity Engineering Co.**  
 Durand, Mich.  
*Simplicity Gyration Screen, Simplicity D'centegrator, Simplicity D'watering Wheel*

**Smith Engineering Works**  
 E. Capitol Drive at N. Holton Ave., Milwaukee, Wis.  
*Gyratory, Gyrasphere, Jaw and Roll Crushers, Vibrating and Rotary Screens, Gravel Washing and Sand Settling Equipment, Elevators and Conveyors, Feeders, Bin Gates, and Portable Crushing and Screening Plants*

**Stedman's Foundry & Machine Works**  
 Aurora, Indiana  
*Stedman Impact-Type Selective Reduction Crushers*

**Stephens-Adamson Mfg. Co.**  
 Aurora, Illinois  
*Complete Stone Preparation Plants, Conveying, Elevating, Screening, Transmission Equipment*

**W. O. & M. W. Talcott, Inc.**  
 91 Sabin St., Providence, R. I.  
*Belt Fasteners, Belt Lacing, Conveyor Belt Fasteners, and Patch Fasteners*

**Taylor-Wharton Iron & Steel Co.**  
 High Bridge, N. J.  
*Manganese and other Special Alloy Steel Castings*

**The Texas Co.**  
 135 E. 42nd St., New York City  
*Asphalts, Lubricating and Fuel Oils*

**The Thew Shovel Co.**  
 Lorain, Ohio  
*Power Shovels, Cranes, Crawler Cranes, Locomotive Cranes, Draglines, Diesel Electric, Gasoline. 3/8 to 2-1/2 cu. yd. capacities*

**The Traylor Engineering & Mfg. Co.**  
 Allentown, Pa.  
*Stone Crushing, Gravel, Lime and Cement Machinery*

**Trojan Powder Co.**  
 17 N. 7th St., Allentown, Pa.  
*Explosives and Blasting Supplies*

**The W. S. Tyler Co.**  
 3615 Superior Ave., N. E., Cleveland, Ohio  
*Wire Screens, Screening Machinery, Scrubbers, Testing Sieves and Dryers*

**Warren Brothers Roads Co.**  
 38 Memorial Drive, Cambridge, Mass.  
*Complete plants and separate plant units for bituminizing all types of stone, sand and gravel aggregate paving mixtures*

